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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,809	07/03/2001	Raghavan Rajagopalan	MRD/63	5120

7590

07/25/2002

David E. Jefferies
Wood, Herron & Evans, L.L.P.
2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202-2917

EXAMINER

MCKENZIE, THOMAS C

ART UNIT

PAPER NUMBER

1624

DATE MAILED: 07/25/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,809

Applicant(s)

RAJAGOPALAN ET AL.

Examiner

Thomas McKenzie Ph.D.

Art Unit

1624

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to an application filed on 7/3/01. There are thirty claims pending. Claims 1-11 are compound claims. Claims 12-30 are use claims. The application concerns some dye containing sulenate ester compounds, compositions, and uses thereof.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 2 and 14, drawn to cyanine dye containing molecules, classified in class 546, subclass 182, among others.
 - II. Claims none, drawn to indocyanine dye containing molecules, classified in class 548, subclass 427, among others.
 - III. Claims 3 and 15, drawn to phthalocyanine dye containing molecules, classified in class 540, subclass 130.
 - IV. Claims 4 and 16, drawn to rhodamine dye containing molecules, classified in class 549, subclass 390, among others.
 - V. Claims none, drawn to phenoxazine containing molecules, classified in class 544, subclass 104, among others.
 - VI. Claims 8 and 20, drawn to phenothiazine containing molecules, classified in class 544, subclass 37, among others.
 - VII. Claims none, drawn to phenoselenazine containing molecules, classified in class 544, subclass 1, among others.
 - VIII. Claims 10 and 22, drawn to fluorescein dye containing molecules, classified in class 549, subclass 265, among others.
 - IX. Claims 5 and 17, drawn to porphyrin containing molecules, classified in class 540, subclass 145.
 - X. Claims 6 and 18, drawn to benzoporphyrin containing molecules, classified in class 540, subclass 145.
 - XI. Claims none, drawn to squaraine containing molecules, classified in class 558, subclass 62, among others.
 - XII. Claims 7 and 19, drawn to corrin containing molecules, classified in class 540, subclass 1, among others.

- XIII. Claims none, drawn to croconium containing molecules, classified in class 558, subclass 62, among others.
 - XIV. Claims none, drawn to azo dye containing molecules, classified in class 534, subclass 713, among others.
 - XV. Claims none, drawn to methine dye containing molecules, classified in class 552, subclass 101, among others.
 - XVI. Claims none, drawn to indolium dye containing molecules, classified in class 548, subclass 465, among others.
 - XVII. Claims none, drawn to crellin containing molecules, classified in class 558, subclass 62, among others.
 - XVIII. Claims 9 and 21, drawn to hypocrellin containing molecules, classified in class 558, subclass 62, among others.
- Claims 1, 11-13, and 23-30 link all groups.

Applicants' parent No. 6,395,257 patent was drawn to indocyanine dye compounds

3. The inventions are distinct, each from the other because of the following reasons: the heterocyclic core of the structure given in claim 1 is the divalent radical DYE. This ring is a mandatory feature and ranges in size from four to sixteen atoms with multiple possible heteroatoms. These multiple claimed rings are chemically non-equivalent and are not art-recognized as sharing the same biological properties. Inventions I-IX, XII, and XIV-XVI have acquired a separate status in the art as shown by their different classification, thus the patent search required for Group I is not co-extensive with that required for Groups II-IX, XII, and XIV-XVI. The basic names of these heterocycles differ, thus the literature search for these various species will be divergent. Because these inventions are

distinct for the reasons given above, restriction for examination purposes as indicated is proper.

4. Even though Group IX and X are classified together, porphyrin and benzoporphyrin are regarded as having separate chemistries. They will have a divergent literature search because of the differing names. In addition there will be separate questions of enablement concerning how Applicants intend to link L and X to these cores.

5. Even though Groups XI, XIII, XVII, and XVIII are classified together, squaraine, croconium, crellin, and hypocrellin rings are regarded as chemically distinct ring systems. The classification being controlled by the sulfonate tail. There will also be separate enablement issues of "how to make" as discussed above.


6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be

accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

8. Please direct any inquiry concerning this communication or earlier communications from the Examiner to Thomas C McKenzie, Ph. D. whose telephone number is (703) 308-9806. The FAX number for before final amendments is (703) 872-9306. The Examiner is available from 8:30 to 5:30, Monday through Friday. If attempts to reach the Examiner by telephone are unsuccessful, you can reach the Examiner's supervisor, Mukund Shah at (703) 308-4716. Please direct general inquiries or any inquiry relating to the status of this application to the receptionist whose telephone number is (703) 308-1235.


BRUCK KIFLE, PH.D.
PRIMARY EXAMINER

 **Mukund Shah**
Supervisory Patent Examiner
Art Unit 1624

TCMcK
July 23, 2002

